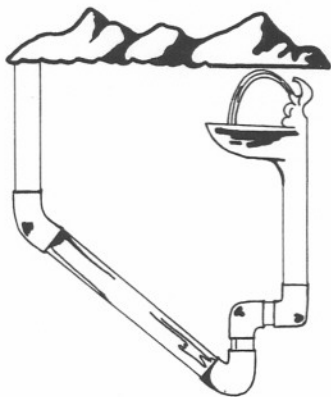


# Water Lines



**Water Lines** is the resource newsletter and calendar of the Nevada Drinking Water and Wastewater Training Coalition.

Volume 17 Summer 2005 issue

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## Special Insert

College education requirements  
for operators grades III and IV

Rural Community Assistance Corporation funds *Water Lines* through a contract with the Nevada Division of Environmental Protection.

Editor, Abigail Johnson

Editor and Production,  
Kristin Middaugh, RCAC

## Featured System:

### South Truckee Meadows Water Reclamation Facility

By Kirk Peterson, SPB Utilities, Inc.

Washoe County's South Truckee Meadows Water Reclamation Facility (STMWRF) is one of the few facilities in the country that reclaims 100 percent of its effluent and biosolids.

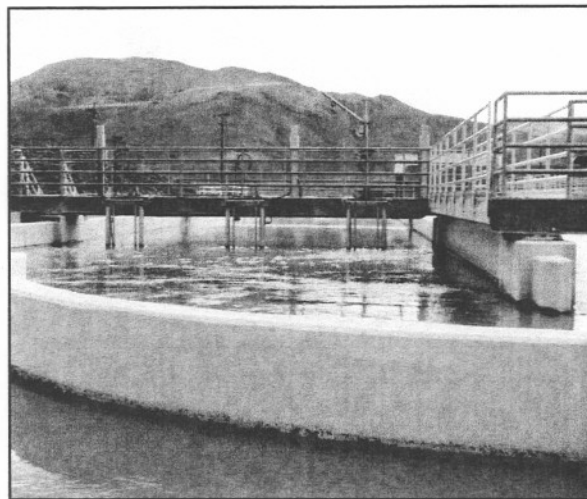
The newly-expanded facility is located in Reno behind Rattlesnake Mountain and serves the



pleted in 2003, the facility has had the capacity to treat more than 4 million gallons of sewage each day.

Improvements included:

- A second racetrack aeration basin (oxidation ditch)
- A High-tech fine bubble membrane panel aeration system
- Four external circular clarifiers (sized for a build out capacity of more than 8 million gallons per day)
- An expanded chlorine contact basin
- Continuous backwash effluent filtration
- A Sophisticated computer-control system



The oxidation ditch at South Truckee Meadows Water Reclamation Facility is one of many improvements.

South Truckee Meadows area. Reuse water soon will be available to the Summit Sierra Shopping Center. Since improvements were com-

The secondary treatment process has two oxidation ditches — each equipped with submersible mixers providing the velocity needed to keep biosolids in suspension during treatment.

The new high-tech aeration system includes variable speed centrifugal blowers to maintain desired oxygen levels. Aeration basin diffusers are ultra-high efficiency membrane  
(Continued on page 2)

## Training coalition seeks new members

By Bob Foerster, Chairman, NTC

Begun in 1995, the Nevada Drinking Water and Wastewater Training Coalition is a nonprofit organization whose mission is commitment to protecting public health and the environment in Nevada's communities by ensuring that high quality training and education are provided to those responsible for drinking water and wastewater systems. Its existence depends upon volunteer efforts.

Training Coalition membership consists of two types, voting and non-voting members. Voting members are federal, state, county and local government organizations; public or private nonprofit organizations; and public or private utilities. Non-voting members include any person, firm, corporation or organization adhering to the objectives of the coalition.

(Continued on page 3)

## Featured System

*(Continued from page 1)*

panels that have reduced the cost of aeration by over 50 percent. Three new chlorination basins were added to the system for a total of six basins. The disinfection system was changed from chlorine gas to sodium hypochlorite solution.

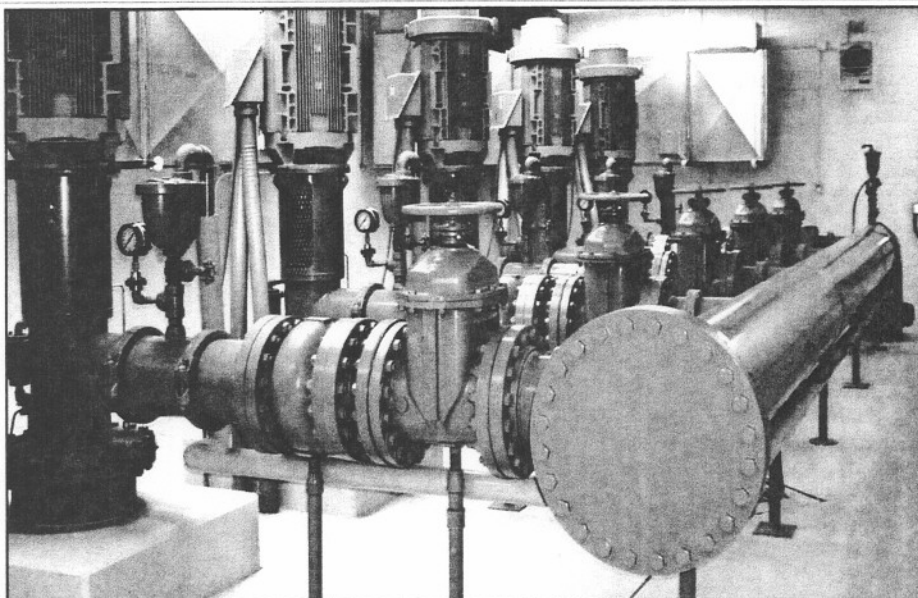
The new computer control system and instrumentation upgrades assist STM-WRF operators to optimize pollutant removal, increase operating efficiency and reliability and minimize chemical and energy use. The extensive use of computer controls also helps to keep facility staffing to a minimum.

The plant effluent is stored in the 1400 acre-foot Huffaker Hills Reservoir (adjacent to the plant) and is applied to reuse sites during irrigation season. The stored effluent from the non-irrigation season is removed from the Huffaker Hills Reservoir, filtered a second time and chlorinated prior to delivery to end users.

More than 1 million gallons of diverted surface water from land south of the facility is recovered and treated for reuse. This arrangement allows the county to maintain zero-discharge into the Truckee River Watershed (no effluent is put into surface water bodies). The resale price for the reuse water is a \$2,500 per acre-foot connection fee and a \$3,500 water rights fee per acre-foot with a \$1 per 1,000 gallons consumption charge.

Waste sludge that is generated from the various processes is also reclaimed daily. Waste solids generated throughout the process are pumped into the adjacent sewage collection and allowed to gravity feed to the Truckee Meadows Water Reclamation Facility where further treatment is provided. Land application is used as the ultimate disposal method of waste biosolids.

Wastewater flows for the area are anticipated to reach 6.0 MGD in 2017. The



*The South Truckee Meadows Reclamation Facility includes a number of state-of-the-art features including these effluent export pumps.*

current flows are approximately 2.2 MGD plus an additional 1.0 MGD of diverted surface water. Further expansion of the facility will be simplified as much of the facility has been constructed to meet the maximum build-out of more than 8 million gallons per day. Two additional oxidation ditches will eventually be located on the north side of the plant outside of the

fenced facility, thereby minimizing the chaos and interference caused by construction.

Washoe County's South Truckee Meadows Water Reclamation Facility provides cost effective wastewater treatment and produces the highest quality effluent recognized by the State of Nevada for irrigation reuse. ♻️

## Arsenic exemption requests trickle in

*By Bert Bellows, Bureau of Health Protection Services*

**A**t this writing, requests for Arsenic Rule exemptions continue to trickle into the Bureau of Health Protection Services (BHPS). To date, we have received applications for exemptions from 25 of the 97 eligible systems. Last issue, I reported that 135 systems will need to comply when January 23, 2006 rolls around. Thirty-eight of those systems are not eligible for exemptions based on their historic arsenic levels, population served or both.

We expect a flood of exemption applications in the next couple of months. What will the state look for to determine if a system is eligible for exemption? Exemption criteria include:

- A system lacking financial, managerial or technical capacity to achieve compliance.
- A system in operation prior to January 23, 2006 (Newer systems will have to show they can't find alternative sources of water).
- A system for which an exemption will pose no unreasonable risk to public health.
- A system that cannot make changes in management or restructuring to achieve compliance

*(Continued on page 3)*

# The Spigot Q & A



**Q.1. What type of oxidizing chemical can be used for disinfection?**

- a. chlorine dioxide
- b. ozone
- c. chlorine
- d. all of the above

**Q.2. Chlorine gas is \_\_**

- a. denser than air.
- b. lighter than air.
- c. lighter than air only when under pressure
- d. the same weight as air by volume.

**Q.3. Calcium hypochlorite is purchased as a \_\_**

- a. coagulant.
- b. gas.
- c. liquid.
- d. powder.

**Q.4. Chlorine leaks in metal containers tend to \_\_**

- a. become larger.
- b. become smaller.
- c. remain the same size.
- d. seal themselves.

**Q.5. A chlorine cylinder valve is thought to be leaking. If ammonia vapor is passed near the valve, the presence of a leak would be indicated by \_\_**

- a. a loud noise.
- b. red vapor.
- c. a 'rotten egg' odor.
- d. white smoke.

Developed by: Skeet Arasmith,  
Linn-Benton College, Oregon.

Crystel Montecinos, Program Development Specialist with the UNR Cooperative Extension, prepares The Spigot.

**Answers to Spigot**  
1.D; 2.A; 3.D; 4.A; 5.D

## Arsenic

(Continued from Page 2)

These requests will be ranked into a priority list according to the water system's arsenic level and population. As time is of the essence, even systems waiting to receive exemption should continue to pursue their particular path to compliance. Those systems that do receive exemption should still work to achieve compliance within the specified time frame.

Keep in mind that once you determine what type of treatment will produce the best results, you must conduct pilot testing to confirm that the method selected does, in fact, do the job.

Ideally, you would conduct pilot testing over the course of an entire year, because water quality varies with the seasons. If you can show that pilot testing has been performed successfully with the

same equipment on water with the same qualities as yours, you may provide this information in lieu of performing your own pilot testing, but providing this proof can be more onerous than doing the testing yourselves.

I've been asked if systems can submit applications for exemptions after January 23, 2006. The answer is, "Why?" The whole idea of applying for the exemption in the first place is to recognize that you're not going to be able to achieve compliance on the required date.

If you don't put in for the exemption prior to the enforcement date, you'll be out of luck. Any exemption requests coming in after the Jan. 23, 2006 will be discarded.

So, in the words of that famous American philosopher, Larry the Cable Guy, "Git 'er done!"

## New members

(Continued from Page 1)

The board of directors presides over the activities of the coalition and consists of a chairperson and four directors who serve for two-years. There are no term limits or geographic restriction — all seats are "at large."

The board meets quarterly to discuss training needs and programs around the state, and to develop the quarterly publication *Water Lines*.

The publication, funded through the NDEP-Drinking Water Revolving Fund, provides articles and training calendars for water, wastewater and solid waste management fields. Board members often contribute to *Water Lines*.

Current board members are: Chairperson Bob Foerster, Nevada Rural Water Association; and members, Dean Adams, University of Nevada; Cameron McKay, Round Hill General Improvement District; Kirk Peterson,

Gold Country Estates; and Mark Walker, University of Nevada.

Board meetings are accessible at several locations via interactive broadcast. Board members are expected to attend each quarterly meeting and may attend at any available location.

Elections will be held for two open seats at the October 2005 general membership meeting. This is a call for operators, administrative staff and managers of voting-member drinking water and wastewater systems to volunteer to become coalition board members.

Nominations will be accepted through Aug. 31, and may be sent by mail, e-mail, or fax. For more information, call Bob Foerster at 775/841-4222.

**\*\*A Training Coalition Board Member nomination form is included on page 5 of this edition of Water Lines\*\***



# How to enact a 'no turn-off' water policy

By Bob Foerster, NTC

*The following is based on a talk entitled How to Enact a "No Turn-Off" Water Policy presented by Al Kramer, Carson City Treasurer, at the March 2005 Nevada Rural Water Association Annual Training and Technical Conference. Nevada's small communities have the option to convert delinquent sewerage, storm drainage or water service accounts into property tax liens. This option helps customers by allowing additional choices as to how to pay their bill, and can save systems the difficulties and administrative and labor costs of notification, turn-offs, collecting late fees and reinstatement of service. An example initial notice, based on the Carson City experience, is below.*

## Important Information

The Carson City Board of Supervisors has made a change to the ordinances concerning payments of utility bills. The change allows delinquent bills to be added to the next years' tax roll. What this means is that except for specifically excluded accounts, we will no longer turn off water for nonpayment of the utility bill. This change was made to give water users greater flexibility in managing their financial affairs. If a person chooses to let the utility bill become delinquent, late fees will be added. In May, a final notice will be sent to each delinquent account stating that if the balance is still delinquent on June first, the delinquent amount will be added to the upcoming property tax bill.

### How this affects you:

a) **For owner occupants**, the only difference from this ordinance change will be that if the utility bill becomes delinquent, water is not turned off. Continued delinquent bills will be converted from a utility lien to a tax lien, to be collected with the upcoming year's property taxes.

b) **If you are the owner of a rental property**, you have two options in handling this ordinance change. The owner can specifically exempt a property from the 'no turn-off' policy, permitting utility staff to disconnect water service on a delinquent account. Or, since the utility bill is mailed to the owner or property manager, the owner or property manager can choose to 'manage' the property to ensure that the utility bill is paid on a timely basis. Thus, these options have to do with who actually pays the utility bill. If paid by the landlord or property manager, the consequences are the same as for the owner occupant: late payment penalties may accrue but the water is not turned off when payments become delinquent. If still delinquent in May, steps will be taken to move the overdue amount to the tax roll. When the tenant is specified as the payer of utility bills, however, things can be different.

**If you are an owner of rental property, you may elect to exempt your property from this 'no turn-off' policy.** Then, should the utility bill become delinquent on the specified rental property, water will be turned off, and remain off, until the account is brought current. We will continue to offer a "will pay agreement" for those who have these exempted accounts and need a little assistance in paying delinquent amounts.

Property owners should realize that these delinquent utility bills constitute **a lien against the property**. Should the delinquent amount be moved to the tax bill, and the taxes remain unpaid, eventually, the property will be sold to pay the taxes (and delinquent utility bills if any). We encourage the owner, in whose name utilities are listed, to pay utility bills to avoid liens on their property. Landlords and property managers who depend upon the tenant to pay for utilities may find a non-paying tenant obligating the owner for the unpaid amount. If the landlord/property manager does not actually pay the bills, attention should be given to the amount due on each bill to ensure regular payments are being made.

Questions can be addressed to: (utility contact information)

Nevada Revised Statutes: Chapter 244 - COUNTIES: GOVERNMENT

NRS 244.36605 Delinquent charges for sewerage, storm drainage or water service in county whose population is less than 400,000. In a county whose population is less than 400,000:

1. The board of county commissioners of a county which provides sewerage, storm drainage or water service, or any combination of those services, may elect by ordinance to have delinquent charges for any or all of those services collected on the tax roll, or collected with the property taxes due on mobile or manufactured

homes that do not meet the requirements of NRS 361.244, in the same manner, by the same persons, and at the same time as, together with and not separately from, the county's general taxes. If the board makes such an election, the board shall cause:

(a) A description of each lot or parcel of real property or each mobile or manufactured home with respect to which the charges are delinquent on May 1; and

(b) The amount of the delinquent charges, to be prepared and submitted to the tax receiver of the county, in a form approved by the tax receiver, no later than June 1.

2. The powers authorized by this section are alternative to all other powers of the county for the collection of such delinquent charges.

3. The real property may be described by reference to maps prepared by and on file in the office of the county assessor or by descriptions used by him.

4. The amount of any such delinquent charge constitutes a lien against the lot or parcel of land or mobile or manufactured home against which the charge has been imposed as of the time when the lien of taxes on the roll or on mobile or manufactured homes attach.

5. Except as otherwise provided in subsection 7, the tax receiver of the county shall include the amount of the delinquent charges on bills for taxes levied against the respective lots and parcels of land or mobile or manufactured homes, as applicable. Thereafter, the amount of the delinquent charges must be collected at the same time and in the same manner and by the same persons as, together with and not separately from, the general taxes for the county.

6. All laws applicable to the levy, collection and enforcement of general taxes of the county, including, but not limited to, those pertaining to the matters of delinquency, correction, cancellation, refund, redemption and sale, are applicable to delinquent charges for services that are collected in the manner authorized by this section.

7. The tax receiver of the county may issue separate bills for delinquent charges that are collected in the manner authorized by this section and separate receipts for collection on account of those charges. 💧



## **Nevada Drinking Water and Wastewater Training Coalition Nomination Form**

Must be received by **August 31, 2005**

Please nominate the person named below (may be self) to serve on the board of the Nevada Training Coalition.

Name/Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City, ZIP: \_\_\_\_\_ Telephone: \_\_\_\_\_

Signature: \_\_\_\_\_ Print your name \_\_\_\_\_

Telephone (if different from above): \_\_\_\_\_

Please fax or mail this information to: Bob Foerster, Nevada Rural Water Association  
363 Fairview Drive, Carson City, NV 89701 Fax: 775/841-4243 e-mail [nvrwa@pyramid.net](mailto:nvrwa@pyramid.net)

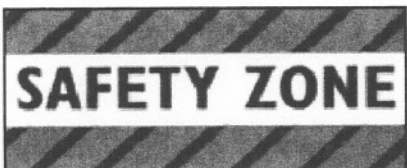
If sending via e-mail, please include all of the information called for in the form.

# Staying safe while working in confined spaces

By Stevan Palmer, Rural Community Assistance Corporation

Over the course of their careers, most utility operators will spend at least some time working in a confined space. Confined spaces:

- Are large enough for a person to enter and perform work
- Have limited or restricted access or exit
- Are not designed for continuous occupancy



Confined spaces in a typical utility include tanks, trenches, vaults, manholes, tunnels, hoppers, and pits.

There are many types of hazards that are associated with confined spaces, depending on the nature of the confined space. Confined space hazards include:

- Oxygen deficiency or enrichment
- Toxic gasses, such as hydrogen sulfide, carbon monoxide and welding fumes
- Combustible gasses, such as methane, propane, acetylene or gasoline fumes
- Electricity
- Potential for an operator to be engulfed in granular material or liquids

A permit is required for any operator to enter a confined space with any of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere
- Contains a material that has the potential to engulf an operator
- Possesses an internal configuration that can potentially trap or asphyxiate an operator
- Contains any other known health hazard

Confined spaces with these characteristics are designated Permit Required Confined Spaces (PRCS). Every utility should have a responsible person who is trained to recognize hazards in a confined space. This person has the authority to issue a permit for entry into a confined space when required. The following steps must be taken prior to any person entering a PRCS:

1. Isolate the space (drain all liquids, remove granular material, lockout/tagout any electrical equipment, and clean up any hazardous materials).
2. Ventilate the space (at least four volumes per hour).
3. Conduct a mandatory planning meeting (discuss future work and rescue plan, review area hazards).
4. Complete the permit (done by the designated responsible person).

5. Test the atmosphere for oxygen content, combustibles and toxic gasses.

6. Enter the space.

Atmospheric testing must be conducted before any entry when the space is vacant, and at least every hour while work is being performed — more frequently when conditions warrant. If any atmospheric limit is exceeded — for any reason — all personnel must immediately exit the space and cannot return until atmospheric conditions are at safe levels.

Any time operators are working in a permit-required confined space, an attendant must be posted near the entrance, and is required to remain in constant communication with the entrants. The attendant is responsible for recognizing hazards, monitoring the atmosphere, controlling access to the space and summoning help in an emergency, as well as keeping records of atmosphere monitoring and who enters and exits the space.

Precautions for entering a non-permit required space are similar, and a responsible person must be on hand to evaluate and mitigate any potential hazards. If contractors are working in a confined space, they must also be aware of any potential hazards. They will follow their own established safety procedures and keep their own permit forms. 📄

## New Nevada operators certified



*These operators passed entry level water certification exams for distribution and treatment grades 1 & 2. Congratulations!*

### Distribution grades 1, 2,

Ahrens, Lee M., D-1; Allred, John A., D-1; Bales Robert P., D-1; Bernhardt, Gregory J. D-1; Blazzard, Barry R., D-1; Chambers, Chad, D-1; Dickton, Glenn D., D-1; Estes, James M. D-1; Flores, Holly M., D-1; Farris, Doug, D-1; Gieszl, Karl P., D-1; Gutierrez, Alfons, D-1; Jablonski, Paul, D-1; Martin, Larry D-1; McMahan, Michael R., D-1; Melton, Chris, D-1; Moriarty, Vincent, D-1; Oliverius, Douglas, D-1; Pierce, James E., D-1; Renwick, Jeffrey, D-1; Rosecrans, Corey E., D-1; Sedberry, Larry, D-1; Talley, Gary, D-1; Ware, Mark, D-1; Williams, Jesse R., D-1; Bates, Greg Ray, D-2; Bryan, Bill, D-2; Chadwick, Franklin, D-2; Crook, Elizabeth, D-2; Fortune, Vicky, D-2; Golliher, Terry R., D-2; Hallahan, Wayne S., D-2; Maes, Christopher D., D-2; Melandow, Greg, D-2; Pickard, Stephen F., D-2; Quilici, Eugene, D-2; Ries, Paul, D-2; Young, Jesse L., D-2

### Treatment grades 1 & 2

Flores, Holly M., T-1; Loeffler, Brad, T-1; Maroushek, Steve A., T-1; Nechodom, Tanya, T-1; Rudi, Kenneth, T-1; Pickard, Stephen F., T-2





# Training Calendar 2005

2005

**June 21**—Gardnerville Ranchos—NvRWA Training. Well Construction/Maintenance/Repair/Abandonment. Info: 775/841-4222. 📍

**June 23**—Winnemucca—NvRWA Training. Well Construction/Maintenance/Repair/Abandonment. Info: 775/841-4222. 📍

**July 12**—Ely—NvRWA Training. Flowmeters. Info: 775/841-4222. 📍

**July 14**—Mesquite—NvRWA Training. Flowmeters. Info: 775/841-4222. 📍

**July 19**—Stagecoach—NvRWA Training. Electrical/Control/SCADA Systems. Info: 775/841-4222. 📍

**July 20**—Tonopah—Budget Development and Rate Setting. Info: Stevan Palmer, 775/323-8882. 📍

**July 22**—UNR Videoconference—Board Basics & Open Meeting Law. Info: Crystel Montecinos at 775/240-1396. 📍

**August 2**—Ely—NvRWA Training. Submersible Motor Seminar. Info: 775/841-4222. 📍

**August 4**—Mesquite—NvRWA Training. Submersible Motor Seminar. Info: 775/841-4222. 📍

**August 17-18**—Ely—Water Distribution Operator Certification Test Preparation Grades I and II. Info: Stevan Palmer, 775/323-8882. 📍

**August 26**—UNR Videoconference—Review for Drinking Water Exam. Info: Crystel Montecinos at 775/784-6853.

**August 26**—UNR Videoconference—Review for Wastewater Exam. Info: Crystel Montecinos at 775/240-1396.

**August 29**—Elko — NvRWA Wastewater/Collection Systems I & II Certification Review Class. Info: Curtis Duff, 775/721-7355 or Nvrwa 775/841-4222.

**August 30**—Tonopah—NvRWA Wastewater/Collection Systems I & II Certification Review Class. Info: Curtis Duff, 775/721-7355 or Nvrwa 775/841-4222.

**August 31**—Reno/Sparks— NvRWA Wastewater/Collection Systems I & II Certification Review Class. Info: Curtis Duff, 775/721-7355 or Nvrwa 775/841-4222.

**September 1**—Reno—Funding Options. Info: Stevan Palmer, 775/323-8882. 📍

**September 6**—Elko—NvRWA Training. Well Construction/Maintenance/Repair/Abandonment. Info: 775/841-4222. 📍

**September 8**—Ely—NvRWA Training. Well Construction/Maintenance/Repair/Abandonment. Info: 775/841-4222. 📍

**September 27**—Stagecoach GID—NvRWA Training. Automatic Control Valves (hands-on training). Info: 775/841-4222. 📍

**September 29**—Reno—Arsenic Treatment Technologies. Info: Stevan Palmer, 775/323-8882. 📍

**September 29**—Elko—NvRWA Training. Automatic Control Valves. Info: 775/841-4222. 📍

**October 4**—Gardnerville Ranchos—NvRWA Training. Submersible Motor Seminar. Info: 775/841-4222. 📍

**October 6**—Tonopah—NvRWA Training. Submersible Motor Seminar. Info: 775/841-4222. 📍

**October**—UNR Videoconference—State Water Regulations. Info: Crystel Montecinos at 775/240-1396. 📍

**October 25**—Gardnerville Ranchos—NvRWA Training. Flowmeters. Info: 775/841-4222. 📍

**October 27**—Tonopah—NvRWA Training. Flowmeters. Info: 775/841-4222. 📍

**November 15**—Tonopah—NvRWA Training. Well Construction/Maintenance/Repair/Abandonment. Info: 775/841-4222. 📍

**November 17**—Pahrump—NvRWA Training. Well Construction/Maintenance/Repair/Abandonment. Info: 775/841-4222. 📍

**December 2**—UNR Videoconference—Review for Drinking Water Exam. Info: Crystel Montecinos at 775/240-1396. 📍

**December 2**—UNR Videoconference—Review for Wastewater Exam. Info: Crystel Montecinos at 775/784-6853.

**December 6**—Pahrump—NvRWA Training. Submersible Motor Seminar. Info: 775/841-4222. 📍

**December 8**—Laughlin—NvRWA Training. Submersible Motor Seminar. Info: 775/841-4222. 📍

📍 *This symbol designates Nevada State Health Division pre-approved training for contact hours. other training may be eligible for contact hours but is not yet pre-approved. Before attending any training, contact the Health Division at 775/687-6615 ext. 235 for approval. Ten hours of approved training equals 1 CEU. A different ratio applies for safety training. Contact Steve Brockway at 775/687-6615 ext. 235 for details.*

University of Nevada, Reno  
Colleges of Agriculture, Biotechnology and Natural  
Resources & Cooperative Extension  
2005 Videoconference Training Calendar: [www.unce.unr.edu/swp.wkshps.htm](http://www.unce.unr.edu/swp.wkshps.htm)  
UNR videoconference classes for water system operators and managers are available in most communities. To request a workshop in your area, call Crystel Montecinos at 775/7240-1396 or e-mail: [xtelle@aol.com](mailto:xtelle@aol.com).

Community College of Southern Nevada  
Wastewater & Water Technology Program  
Info: LeAnna Risso, 702/434-6600 ext. 6418.

WWET Training in Clark County  
Info: Jeff Butler 702/258-3296; see [www.wwet.org](http://www.wwet.org) for a current training calendar.

State of Nevada Water Certification Exams  
All exams will be proctored during the week of the date listed. Applications are due to the state (Steve Brockway) 45 days before exam dates. A proctor will contact examinees to schedule testing. 2005 exam dates are, June 15, Sept. 14 and Dec. 14. Info: Debra Kaye, 775/834-8114.

Wastewater Certification Board Testing  
Wastewater certification exams are given in March, June, Sept., Dec. Info: 775/465-2045 or [www.nvwewa.org](http://www.nvwewa.org).

## Nevada Drinking Water and Wastewater Training Coalition

### American Water Works Association California/Nevada Section

[www.ca-nv-awwa.org](http://www.ca-nv-awwa.org)  
Philip Walsack, Smaller Utilities  
Committee Chair, 775/841-3131  
Nicole Schreuder, Education Mgr.,  
909/291-2101

### Indian Health Service

Dominic Wolf, 775/784-5327

### Nevada Division of Environmental Protection

[www.ndep.nv.gov/index.htm](http://www.ndep.nv.gov/index.htm)

Adele Basham, DWSRF, 775/687-9488  
Bill Coughlin, AB 198 Water Grant Program,  
775/687-9422  
Nevan Kane, Wellhead Protection,  
775/687-9426

### Nevada Rural Water Association

[www.nvrwa.org](http://www.nvrwa.org)  
775/841-4222  
Bob Foerster, Director  
John Allred  
Jon Anderson  
Curtis Duff  
David Miller  
John Scovil  
Elizabeth Stubbs  
Teresa Taylor  
David Willard

### Nevada State Health Division

[www.state.nv.us/health/bhps](http://www.state.nv.us/health/bhps)  
775/687-6615  
Jim Balderson, SWAP, ext. 228  
Steve Brockway, CEU approval, ext. 235  
Dana Pennington, ext. 237  
Bert Bellows, ext. 227 arsenic

### Nevada Water Environment Association

[www.wef.org](http://www.wef.org)  
Starlin Jones, 775/861-4104  
Eric Leveque, 702/792-3711

### Public Utilities Commission of Nevada

[www.state.nv.us/puc](http://www.state.nv.us/puc)  
Steve McGoff, Utility Engineer,  
775/687-6040

### Rural Community Assistance Corporation

[www.rcac.org](http://www.rcac.org)  
775/323-8882  
John Dailey, Regional Manager  
Karen McBride  
Stevan Palmer  
Abby Johnson, consultant, 775/885-0612

### U.S. Environmental Protection Agency, Region 9

[www.epa.gov/region09](http://www.epa.gov/region09)  
Marvin Young, 415/972-3561

### USDA Rural Development

[www.usda.gov/rus/water/index.htm](http://www.usda.gov/rus/water/index.htm)  
Mike Holm, 775/887-1222, ext. 26  
Kay Vernatter, 702/262-9047 ext. 113

### University of Nevada, Reno Dept. of Civil Engineering

Dean Adams, 775/784-1474

### UNR Natural Resources and Environmen- tal Science and Cooperative Extension

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Nevada Drinking Water and Wastewater Training Coalition

*Water Lines*  
Summer 2005





# Water Lines Special Insert

## New Post Secondary Education Requirements

By Crystel Mentecinos, University of Nevada, Reno

The Nevada Board of Health has adopted new regulations recommended by the State Board of Certification Advisory Board.

Although the new regulations will require more education for upper-level operators, they can be proud that as water systems become increasingly complex they will have the skills and knowledge to do their jobs well and thereby protect public health.

The new regulations bring Nevada into line with the 1996 Amendments to the Safe Drinking Water Act.

Changes to the regulations (NAC 445A.617 through 445A.652) require that **new** treatment and distribution operators **grades III and IV** complete post secondary education courses. The changes apply only to new operators, not those renewing their certification. However any lapse in certification will require operators to meet the new educational requirements.

Post secondary courses are defined as "a successfully completed college level course, at least 36 hours in length that is related to the drinking water profession." Treatment and distribution grade III will need to complete two post secondary courses while grade IV operators will need to complete three such courses.

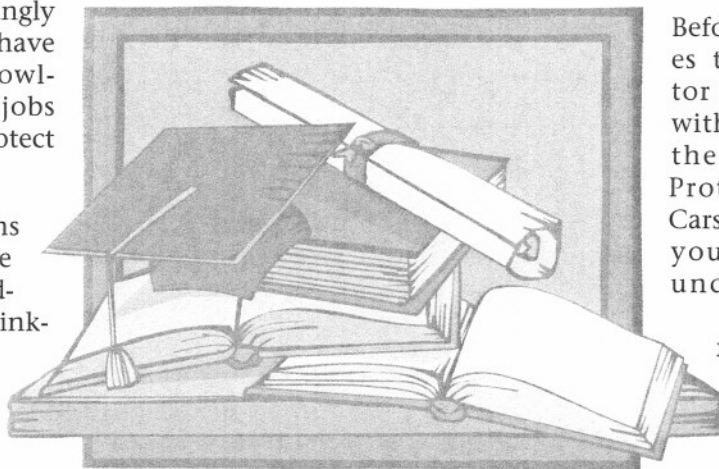
Providers of post secondary education include:

- Accredited academic institutions
- Organizations accredited by the International Association of Continuing Education Training (IACET)
- Authorized providers of IACET

Examples of courses that will be accepted are:

- Regular semester college and university courses

- Water Program correspondent courses from California State University (<http://www.owp.csus.edu/drinkingwater.htm>)
- Some CA-NV AWWA Water College Programs.
- Courses in math, chemistry, hydrology and biology will be considered.



Before taking any courses to fulfill your operator certification, check with Steve Brockway of the Bureau of Health Protection Services in Carson City to make sure your course qualifies under the regulation (775-687-6615 x235).

Many community colleges offer degree programs for water treatment operators.

The program at Community College of Southern Nevada offers a 75 credit-hour associate of applied science degree. Students may also earn a 31 credit-hour certificate of achievement in environmental safety and health.

How will these new regulations affect you or your water system?

As Nevadans are sparsely spread across this large state and classrooms are limited, there will undoubtedly be some hardship in obtaining the increased level of education.

The Nevada Water & Wastewater Training Coalition is trying to address the needs of water operators who want to complete this new requirement.

This month we are conducting a survey to find out how we can make available post-secondary education to more operators.

Please take a moment to fill out the survey on the back of this insert and mail to:

**RCAC, 50 Washington St #101 in Reno, NV 89503 or fax to: 775-323-8886.**

# Post Secondary Requirements Survey

## I am currently certified as a:

- ☐ Distribution or Treatment Operator Grade I
- ☐ Distribution or Treatment Operator Grade II
- ☐ Distribution or Treatment Operator Grade III
- ☐ Distribution or Treatment Operator Grade IV
- ☐ I am not yet certified.

## I wish to increase my operator grade level:

- ☐ True
- ☐ False

## I would rather take the post secondary education requirements:

- ☐ Via correspondence courses
- ☐ Through on-line web courses
- ☐ Through community college courses
- ☐ Through University courses

## If it were available, I would prefer to take a degree program and earn a certificate of achievement or an associate of applied science:

- ☐ True
- ☐ False

## It's easier for me to take:

- ☐ Day classes
- ☐ Evening classes
- ☐ 6- to 8-hour Saturday classes

## I currently have college or university credits that may apply to my certification:

- ☐ True
- ☐ False
- ☐ Don't know

## My water system is located in \_\_\_\_\_ County, Nevada (choose one).

- |                                         |                                            |                                           |
|-----------------------------------------|--------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Carson City    | <input type="checkbox"/> Churchill County  | <input type="checkbox"/> Clark County     |
| <input type="checkbox"/> Douglas County | <input type="checkbox"/> Elko County       | <input type="checkbox"/> Esmeralda County |
| <input type="checkbox"/> Eureka County  | <input type="checkbox"/> Humbolt County    | <input type="checkbox"/> Lander County    |
| <input type="checkbox"/> Lincoln County | <input type="checkbox"/> Lyon County       | <input type="checkbox"/> Mineral County   |
| <input type="checkbox"/> Nye County     | <input type="checkbox"/> Pershing County   | <input type="checkbox"/> Storey County    |
| <input type="checkbox"/> Washoe County  | <input type="checkbox"/> White Pine County |                                           |

Comments or Suggestions: \_\_\_\_\_

Name and Address (optional): \_\_\_\_\_

**Mail to: RCAC, 50 Washington St #101 in Reno, NV 89503 or fax to: 775-323-8886.**